

which is oriented perpendicular to these surfaces.

In order to achieve this three dimensional vibration motion, the access of the motor shaft includes an angle less than 90 degrees with the surface sides of the vibrator plate with the surface sides of the backrest element, as shown in Figure 1.

In order to allow the vibrator to be integrated or mounted inside a backrest element, for example, of a motor car seat, or an office chair, a specific vibrator is required. The vibrator contains an electric motor and an unbalanced mass driven by the motor. The electric motor is an external rotor motor with an outer housing which is driven peripherally around a motor access and with an inner stator which has a motor winding. The outer housing contains the unbalanced mass and the electric motor is attached to a bracket which is held on a vibrator plate such that the motor access includes an angle less than 90 degrees with the vibrator plate, and wherein the vibrator plate is attached directly to a back of said backrest element. Satoh et al is said to teach all the limitations of the claimed invention except the fact that the vibrator and the electric motor therein is attached to a vibrator plate such that the motor axis includes an angle less than 90 degrees with the surface sides of the vibrator plate. Applicant respectfully disagrees with this analysis in that the vibration motor does not contain the required structure, that is, an electric motor which is attached to a bracket which is held on a vibrator plate such that the motor axis includes an angle less than 90 degrees with the vibrator plate and that the outer housing is what contains the mass eccentricity in the Satoh et al document, 57, is fixedly attached to the outer circumference of the rotor yoke 55. Structurally these motors are distinct and do not produce the desired three dimensional vibration produced by applicant's structure. Therefore, the attempt to combine Spurlin has no bearing on applicant's claimed invention. Spurlin pertains to a vibratory device for conveyors and such patent does not disclose or suggest a motor axis defining an angle less than 90 degrees with a vibrator plate or

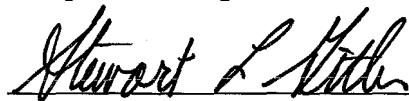
with the surface of a backrest element or any surface whatsoever. Here the axis of rotation of the vibratory element as shown in Figure 1 of the Spurlin patent is perpendicular to the plane of the surface it desires to vibrate. Therefore, there is no relevance nor combined teaching which can be made.

Fukuoka refers to a motor car seat with a vibrator underneath the seat. The vibratory device is not arranged inside the backrest element nor is the vibrator an external electric rotor motor with an unbalanced mass contained on an outer portion of the housing of the motor. Without the particular structural design as claimed in claim 12 the desired three dimensional vibratory motion as produced by applicant's claimed structure and motor is not produced.

The amended claims focus on the desired structure including all elements which are not suggested nor taught by Satoh et al, Fukuko, or Spurlin used in combination with either or all three of the references.

Reconsideration to approve the claims as presently presented is respectfully requested. If additional any fees are due or owing, please charge Deposit Account No. 08-2455 the deficiency.

Respectfully submitted,



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Enclosures

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